REMARKS

Part 1. Rejections based on Lencevicius as the primary reference

1. Rejection of Claims 1, 4, 11, 13

Claims 1, 4, 5, 11 and 13 stand finally rejected as anticipated by Lencevicius et al., US Patent Publ. 2004/0204183.

Claim 1 is as follows.

1. (original) A method of activating call forwarding for a mobile station, comprising the steps of :

monitoring a measure of received signal strength at said mobile station;

automatically transmitting a first feature code from said mobile station to a wireless network when said monitored measure of received signal strength falls below a threshold level, said first feature code activating call forwarding for said mobile station such that incoming calls are directed to a previously programmed directory number;

continuing to monitor signal strength at said mobile station during a period when call forwarding is activated;

automatically transmitting a second feature code from said mobile station to a wireless network when said signal strength rises above said threshold level, said second feature code deactivating said call forwarding.

Applicants traverse the rejection. Basically, Lencevicius describes a method of sending all incoming calls to voice mail (or only some incoming calls to voicemail) that is triggered when a signal is received to initiate a *power management mode* and is triggered off when the power management mode is disabled. Conceptually, the Lencevicius method of call forwarding is based on preservation of battery power levels, not on received signal strength measurements. The two concepts are different. Further, the calls are not forwarded to a previous programmed directory number, as in claim 1, but rather merely to voice mail. Additionally, the reference does not describe automatically transmitting a second feature code to the network to deactivate call forwarding when the received signal strength rises above the threshold.

A. monitoring a measure of received signal strength and using it to transmit a feature code to activate call forwarding

Claim 1 requires monitoring a measure of received signal strength at the mobile station and automatically transmitting a first feature code from the mobile station to a wireless network to activate call forwarding when the monitored measure of received signal strength falls below a threshold level. This is not what is disclosed in Lencevicius.

Lencevicius is concerned with power management on a wireless device—maximizing the usefulness of the device in view of limited battery capacities in such devices and the ever-increasing functionality such devices have. See Background, paragraphs 2-5, 16. Lencevicius therefore provides for a method and system for managing power consumption on the device, either in response to user input of a signal or automatically when the battery level drops off a certain amount. Summary, paragraphs 6, 16 and 24. Lencevicius describes several ways of managing power, including deferring the ability of the device to receive incoming calls. See paragraphs 6, 20, 25, 28. The deferring or limiting the ability to receive incoming calls is *triggered by receipt of the power management initiation signal* (see paragraphs 6, 24, 26), *not by monitoring received signal strength*. The triggering event, receipt of a power management initiation signal, may be due to a manual action by the user or automatically in response to decrease in the battery level (see paragraph 24). Call forwarding to voice mail is not triggered in response to a received signal level dropping below a threshold, as claimed in claim 1.

The Examiner cites to paragraphs 24 and 38 for the subject matter of monitoring received signal strength. While paragraph 38 discloses monitoring signal strength, the purpose of the monitoring is to *trigger the transmission of outgoing messages*, not limit

the ability to receive incoming calls. See Figure 7 and paragraph 35-37. It is clear that the discussion of Figure 7 in paragraph 38 is referring to the method of deferring transmission of outgoing messages as described in paragraphs 35-37, not deferring receipt of incoming messages. Thus, while paragraph 38 discloses monitoring signal strength, the purpose and use is different from claim 1. Claim 1 recites "automatically transmitting a first feature code from said mobile station to a wireless network when said monitored measure of received signal strength falls below a threshold level, said first feature code activating call forwarding for said mobile station such that incoming calls are directed to a previously programmed directory number." Lencevicius teaches monitoring signal strength and then sending outgoing messages if the signal strength is high enough, which is not what is claimed in claim 1.

The difference between the invention and Lencevicius is significant. There can be times where a cell phone is fully charged and yet signal strength is too weak to receive a call. In this case, the present invention will trigger the call forwarding. In Lencevicius, no such forwarding will occur. The user will not activate the power management feature with a full battery, and with a full battery the automatic power management will not be initiated either. The user in this situation will have their calls forwarded in accordance with this invention, but Lencevicius calls will not be forwarded.

Accordingly claim 1 is not anticipated for this reason.

B. incoming calls are directed to a previously programmed directory number

Claim 1 requires that feature code, issued in response to signal strength falling below a threshold, is such that incoming calls are directed to a previously programmed directory number. For example, if a user's cell phone has a low received signal strength,

the calls will be forwarded to their home number or office number. In Lencevicius, the call is merely sent to the user's voice mail, which is not a separate directory number. See paragraph 28 (" . . . mobile terminated calls and SMS messages are directed to the voicemail or SMS server storage." . . . Basically the mobile device behaves like the device has been turned off . . . ").

Claim 1 is not anticipated for this additional reason.

C. Automatically transmitting a second feature code to the network to deactivate call forwarding when the signal strength rises above the threshold.

Claim 1 further recites that method includes steps of continuing to monitor signal strength at the mobile station during a period when call forwarding is activated and automatically transmitting a second feature code from the mobile station to a wireless network when the signal strength rises above the threshold level, the second feature code deactivating said call forwarding. This further feature is not disclosed in Lencevicius. In Lencevicius, paragraph 28, received signal strength is only use to determine whether or not to transmit outgoing messages. Signal strength is not the trigger to initiate call forwarding to voice mail (such trigger being the receipt of a power management initiation signal by the user or by low battery condition, see paragraph 6), nor is it the trigger to turn off call forwarding to voice mail.

For this element of the claim, the Examiner cites to paragraphs 30 and 38. Paragraph 30 discusses a selective call acceptance feature in which, while the power management system is on, certain parties can still get through and place a call to the phone. Paragraph 30 states that when the power management profile is disabled, then a

USSD message is sent to deactivate call forwarding. Thus, the trigger for turning off call forwarding is deactivation of the power management profile feature (presumably manually or automatically when the battery is recharged), *not* received signal strength increasing above a threshold level as claimed in claim 1.

Accordingly, claim 1 is not anticipated for this additional reason.

Therefore, the anticipation rejection of claims 1 and claims dependent therefrom should be withdrawn.

Claim 11

Claim 11 is an apparatus claim directed to a wireless telephone and is similar in scope to method claim 1. The remarks under sections A and C of the analysis of claim 1 relative to Lencevicius apply equally to claim 11 and are incorporated here by reference.

Claim 13

Independent claim 13 recites:

13. In a cellular telephony network comprising a plurality of base transceiver stations and roaming mobile stations subscribing to said network, the improvement comprising:

providing a service control node in said cellular telephony network that activates and deactivates a call forwarding service for said roaming mobile stations, wherein said call forwarding service is activated and deactivated by transmission of first and second feature codes from said roaming mobile stations, respectively, and further wherein said first and second feature codes are transmitted when a monitored measure of received signal strength at said mobile stations falls below, and rises above, a threshold level, respectively.

The above arguments in section C apply to claim 13, since the claim recites that the first and second feature codes are transmitted when a monitored measure of received

signal strength at said mobile stations falls below, and rises above, a threshold level, respectively, the same subject matter described above in claim 1. As explained above, Lencevicius does not operate in this fashion.

2. Claims 2, 3, 7 and 10

The Examiner rejected claims 2, 3, 7 and 10 as obvious over Lencevicius in view of Lundborg (6,782,262). The rejection is traversed. Lundborg does not overcome the deficiency of Lencevicius in failing to teach claim 1.

In particular Claims 2, 3 and 7 and 10 depend from claim 1. Lundbord is concerned with handoff of mobile devices between cells and methods of tuning a parameter indicating the minimum sufficient signal strength threshold used in determining whether or not a preferred cell is suitable. (Background, col. 1 lines 7-14). Lundbord does not address call forwarding, nor does he teach or suggest that call forwarding, having been switched on, should be switched off in accordance with the teachings of claim 1 discussed above. Combining Lundborg with Lencevicius only suggests, at most, using Ec/Io measurements as a mechanism for measuring signal strength initially and sending a group of outgoing communications from the phone to the network as mentioned in Figure 7 and pargraph 38 of Lencevicius. Neither Lundbord nor Lencevicius suggest monitoring signal strength as the trigger to initiate the call forwarding (recall that Lencevicius is concerned with batter power levels and received signal strength and power level are different concepts). Nor do they teach, either solely or in combination, continuing to monitor received signal strength after call forwarding has been initiated and sending a second feature code when signal strength has improved

above the threshold level. Accordingly, they cannot render claims 2, 3, 7 and 10 obvious.

3. Claim 5

The Examiner rejected claim 5 as obvious over Lencevicius in view of Akhteruzzaman et al. Claim 5 relates to the method of claim 1 and adds that the previously programmed directory number is changeable by the user of the mobile station interactively.

As noted above, Lencevicius uses a power management initiating signal to trigger call forwarding to voice mail, and to deactivate the call forwarding. Lencevicius does not use received signal strength in the triggering event either to turn on or off call forwarding. Furthermore, claim 1 requires continuing to monitor signal strength at the mobile station during a period when call forwarding is activated and automatically transmitting a second feature code from said mobile station to a wireless network when said signal strength rises above the threshold level, the second feature code deactivating call forwarding. Akhteruzzaman does not work this way either.

Akhteruzzaman uses GPS location as the trigger to return to normal mode. In particular, if there is a weak signal and the user has previously indicated that call forwarding should occur if the signal strength becomes weak, the method obtains a current GPS location of the mobile station. A computer program then proceeds to look up a land line telephone directory number stored in the mobile station's memory associated with the mobile station's GPS location. If there is no directory number for the current location, the process is complete and no call forwarding is accomplished. Only if

there is a directory number for the GPS location of the mobile station will call forwarding proceed. Thus, in Akhteruzzaman, after call forwarding has been triggered, the mobile device continues to monitor ***its GPS location*** (***not received signal strength***) and only after the device has left a predetermined GPS boundary will the device send a new signal to revert to normal operation. See Figure 8, steps 194 and 196, and the text at column 8, lines 46-67.

Accordingly, neither Akhteruzzaman nor Lencevicius disclose the invention of independent claim 1.

Applicant further notes that the method of Akhteruzzaman is rather onerous and cumbersome. His method requires the subscriber to manually enter specific call forwarding numbers for particular GPS locations where signal strength is weak and determine (programmatically, apparently) appropriate GPS boundaries for the location. (Col. 5 lines 65-67; col. 8 lines 65-67). Additionally, the approach has limited usefulness, since it is dependent on a land line telephone being present nearby. What if no landline phone is nearby? What if the person does not know in advance whether a particular location has a weak signal? What if the subscriber underestimates the size of the boundary at which a "restore normal operation" signal is sent to the network? Akhteruzzaman has no answers for these situations. Conversely, the present invention:

- does not require usage of GPS or positioning information for the device,
- does not require a land-line phone to be nearby,
- does not require a user to have to know in advance whether a particular zone has cell coverage or not,
- is not dependent on the charge state of the battery, and

- does not require any additional power management system, as in Lencevicius.

Call forwarding is triggered and un-triggered by monitoring signal strength, and does not require continuous monitoring of the location of the device. The invention is clearly not obvious over the combination of Lencevicius or Akhteruzzaman.

4. Claim 6

Claim 6 is rejected as obvious in view of Lencevicius in view of Lo (RE 37,301). While the Examiner is correct that Lo teaches transmitting information codes over access channels, this teaching of Lo fails to overcome the deficiency of Lencevicius in failing to teach the subject matter of claim 1. Lo adds nothing to how a mobile device should perform call forwarding using a monitoring of received signal strength. Accordingly, the rejection of claim 6 should be withdrawn.

5. Claim 8

Claim 8 stands rejected over Lencevicius in view of Jensen (2002/00022480). Claim 8 recites that the threshold level [to initiate sending of feature codes to turn on and off call forwarding] depends on the type of mobile station. The applicants traverse the rejection.

The Examiner cites Jensen for a teaching of call forwarding wherein the threshold level for call forwarding varies on the type of mobile station (Jensen, paragraph 15). Applicants submit that this is not a correct analysis of Jensen. Jensen teaches that values involved (signal strength, related to interference of channels between cells) are "determined by the particular type of ***mobile system involved***." The reference then

discusses various types of mobile systems (not ***types of devices, as in claim 8***) such as CDMA system and AMPS (American mobile phone systems). Claim 8 is concerned with different types of mobile devices (such as year, make and model of device) within a given mobile phone system, not differences between mobile phone systems.

Moreover, even if the concepts of Jensen were applied to Lencevicius, the resulting combination does not overcome the rejection of claim 1 since Jensen is silent on call forwarding as claimed in claim 1 and instead is directed to handoff between cells and determining interference between cells. It does not overcome the deficiency of Lencevicius discussed above.

Furthermore, applicant's representative can find no mention of feature codes in the Jensen reference or usage of such features codes to turn on or off call forwarding.

In view of the above, the rejection of claim 8 should be withdrawn.

6. Claim 9

Claim 9 stands rejected as obvious over Lencevicius in view of Chawla (6,496,700). Claim 9 depends from claim 1 and further recites that the threshold level [to initiate sending of feature codes to turn on and off call forwarding] is within a certain decibel range.

Assuming for the sake of argument that Chawla is appropriate for citation of the subject matter of claim 9, it does not make up for the deficiency of Lencevicius in failing to teach or suggest the subject matter of claim 1, from which claim 9 depends. In particular, Chawla is directed to methods for determining organizational parameters in a wireless system and discloses methods of determining signal strength and losses in

wireless communications systems. Chawla is silent on a call forwarding feature, let alone call forwarding as claimed in claim 1. Even if Chawla was combined with Lencevicius as the primary reference, at most it teaches characterization of organization parameters in a wireless system such as the Lencevicius system, but that fails to account for a method by which call forwarding should be terminated, by means of feature codes, as claimed in claim 1. Accordingly, the rejection of claim 9 should be withdrawn.

7. Claim 12

Claim 12, which depends from claim 11, stands rejected as obvious over Lencevicius in view of Haub (2004/015429). Haub is cited for a teaching of circuitry monitoring a ratio of Ec/Io where Ec is a measure of carrier strength and Io is a measure of interference.

Haub's teaching does not overcome the deficiency of Lencevicius in failing to teach or suggest the feature of claim 11 of a wireless telephone that includes logic "automatically continuing to monitor the received signal strength after the first feature code is transmitted ***and for transmitting a second feature code . . . deactivating call forwarding when said circuitry determines that the received signal strength, having fallen previously below a threshold level, rises above said threshold level.***" As noted above, Lencevicius uses a power management initiation signal (either manual or automatically when the battery level drops low) to trigger call forwarding, and disabling of the power profile deactivates call forwarding (paragraph 30).

Haub's teaching, if applied to Lencevicius, would suggest at most one method to determine location or to select an initial mode of transmission, and is irrelevant to Lencevicius since that references uses a power management initiation signal, not signal strength measurements, to initially activate call forwarding. Haub does not suggest continuing to monitor Ec/Io after a call forwarding signal has been sent and deactivating call forwarding in the event Ec/Io rises above the threshold.

Consequently, even if Haub were to be combined with Lencevicius, the result is the not invention of claim 12. The rejection should be withdrawn.

8. Claim 14

Claim 14 stands rejected as obvious over Lencevicius in view of Kissee. The Examiner cites Kissee for a teaching of a service control node setting a threshold level (col. 13 lines 10-13.) The disclosure of received signal strength indicator (RSSI) in Kissee is in the context of how cells should be ranked in order to prioritize cells and handle a situation of overflow or excess call volumes. See col. 12 lines 48 et seq., col. 1 lines 7-14; col. 2 lines 51-65. The context of Kissee' teaching of setting thresholds for purposes of cell rankings adds nothing to the utter lack of a teaching of Lencevicius of monitoring received signal strength and sending a feature code to a network node to turn off call forwarding when the signal strength rises above a threshold. Since the network node of Kissee ***is ranking cells, not activating and deactivating call forwarding***, it does not teach a "service control node in said cellular telephony network that activates and deactivates a call forwarding service for said roaming mobile stations, wherein said call forwarding service is activated and deactivated by transmission of first and second

feature codes from said roaming mobile stations, respectively, and further wherein said first and second feature codes are transmitted when a monitored measure of received signal strength at said mobile stations falls below, and rises above, a threshold level, respectively", as claimed in claim 13, from which claim 14 depends.

9. Claim 15

Claim 15 stands rejected as obvious over Lencevicius in view of Balachandran (5,594,943). The Examiner cites Balachandran for a teaching of a threshold level at which calls are dropped, citing to col. 2 lines 24-25. The discussion of thresholds in Balachandran is in the context of ***handoff of a mobile between cells/sectors, not call forwarding***. The document discloses that there can be two thresholds, a primary one and a secondary or emergency threshold, see col. 2 lines 2-5. The reference is explaining background information on handoffs between cells and sectors, noting that such handoffs preferably occur so as to avoid dropping of calls. That teaching is totally irrelevant to the subject matter of claim 15 (and independent claim 13) of a node in a network that is switching on and off call forwarding in response to measurements of received signal strength. Balachandran fails to overcome the deficiency of Lencevicius in failing to teach of monitoring received signal strength and sending a feature code to a network node to turn off call forwarding when the signal strength rises above a threshold.

10. Claim 16

Claim 16 stands rejected as obvious over Lencevicius in view of Hilliard (U.S. 6,876,949). Claim 16 depends ultimately on claim 13 and recites that the threshold level

(for triggering sending a feature code to turn off call forwarding) is offset from a dropped call level by a fixed amount.

Hilliard is non-analogous art, in that it is referring to calibration of inductive vehicle detectors. See col. 4 lines 54-col. 5 line 23. The present invention is directed to call forwarding in the field of wireless telephony. The two fields have nothing to do with each other. Furthermore, the Hilliard method discloses nothing in the way of call forwarding for wireless telephones and adds nothing to the deficiency of Lencevicius to suggest the subject matter of claim 13.

11. Claim 17

Claim 17 stands rejected over Lencevicius in view of Jensen. Claim 17 depends from claim 13 and adds the same subject matter as found in claim 8, discussed above.

The Examiner cites Jensen for a teaching of call forwarding wherein the threshold level for call forwarding varies on the type of mobile station (Jensen, paragraph 15). Applicants submit that this is not a correct analysis of Jensen. Jensen teaches that values involved (signal strength, related to interference of channels between cells) are "determined by the particular type of ***mobile system involved***." The reference then discusses various types of mobile systems (not ***types of devices, as in claim 17***) such as CDMA system and AMPS (American mobile phone systems). Claim 17 is concerned with different types of mobile devices (such as year, make and model of device) within a given mobile phone system, not differences between mobile phone systems. Accordingly, when the teaching of Jensen is applied to Lencevicius it fails to overcome the three deficiencies noted above in the analysis of claim 13.

Part 2. Rejections based on Akhteruzzaman as the primary reference

1. Claims 1, 4, 5, 11 and 13

At page 12 of the office action, the Examiner rejected claims 1, 4, 5, 11 and 13 as obvious[1] over Akhteruzzaman in view of Lencevicius. The applicants respectfully traverse the rejection.

The call forwarding method of Akhteruzzaman works in a very different way from the invention of claim 1 in terms of how a mobile device returns to normal service (end of call forwarding). Akhteruzzaman uses ***GPS location*** as the trigger to return to normal mode. In particular, if there is a weak signal and the user has previously indicated that call forwarding should occur if the signal strength becomes weak, the method obtains a current GPS location of the mobile station. A computer program then proceeds to look up a land line telephone directory number stored in the mobile station's memory associated with the mobile station's GPS location. If there is no directory number for the current location, the process is complete and no call forwarding is accomplished. Only if there is a directory number for the GPS location of the mobile station will call forwarding proceed.

In Akhteruzzaman, after call forwarding has been triggered, the mobile device continues to monitor ***its GPS location*** (***not received signal strength***) and only after the device has left a predetermined GPS boundary will the device send a disabling signal to

[1] The rejection heading for paragraph 15 uses the word "anticipated" but the body of the rejection on page 13 clearly indicates that the Examiner is relying on 35 U.S.C. § 103, not § 102, to reject these claims. Hence the rejection is treated as one of obviousness, not anticipation.

revert to normal operation. See Figure 8, steps 194 and 196, and the text at column 8, lines 46-67.

Applicant further notes that the method of Akhteruzzaman is rather onerous and cumbersome. His method requires the subscriber to manually enter specific call forwarding numbers for particular GPS locations where signal strength is weak and determine (programmatically, apparently) appropriate GPS boundaries for the location. (Col. 5 lines 65-67; col. 8 lines 65-67). Additionally, the approach has limited usefulness, since it is dependent on a land line telephone being present nearby. What if no landline phone is nearby? What if the person does not know in advance whether a particular location has a weak signal? What if the subscriber underestimates the size of the boundary at which a "restore normal operation" signal is sent to the network? Akhteruzzaman has no answers for these situations.

As discussed above in the anticipation rejection of claim 1, Lencevicius uses a power management initiation signal to turn on call forwarding (in response to user input or a battery level falling) and call forwarding is turned off when the power management profile or feature is deactivated or disabled. Lencevicius, paragraph 30. (Lencevicius uses signal strength as a trigger to send outgoing messages, paragraph 38, but not as a trigger to activating and deactivating call forwarding).

Thus, while Akhteruzzaman uses GPS location as the triggering event to turn off call forwarding, Lencevicius uses power management initiation signals. Akhteruzzaman in a location-based method, Lencevicius is a power management-based method. *Neither method deactivates call forwarding based on received signal strength rising above a threshold.*

The present invention presents numerous advantages over both Akhteruzzaman and Lencevicius, further suggesting its non-obviousness:

- it does not require usage of GPS or positioning information for the device,
- it does not require a land-line phone to be nearby,
- it does not require a user to have to know in advance whether a particular zone has cell coverage or not;
- it is not dependent on the charge state of the battery, and
- it does not require any additional power management system, as in Lencevicius.

Accordingly, the two references, either singly or in combination, fail to teach the invention of claim 1.

Claim 11

Claim 11 is an apparatus claim directed to a wireless telephone and is similar in scope to method claim 1. The above analysis of claim 1 relative to Akhteruzzaman and Lencevicius applies equally to claim 11 and are incorporated here by reference.

Claim 13

Independent claim 13 recites:

13. In a cellular telephony network comprising a plurality of base transceiver stations and roaming mobile stations subscribing to said network, the improvement comprising:

providing a service control node in said cellular telephony network that activates and deactivates a call forwarding service for said roaming mobile stations, wherein said call forwarding service is activated and deactivated by transmission of first and second feature codes from said roaming mobile stations, respectively, and further wherein said first and second feature codes are transmitted when a monitored measure of received

signal strength at said mobile stations falls below, and rises above, a threshold level, respectively.

The above arguments apply to claim 13, since the claim recites that the first and second feature codes are transmitted when a monitored measure of received signal strength at said mobile stations falls below, and rises above, a threshold level, respectively, the same subject matter described above in claim 1. Neither reference discloses a service control node that responds to feature codes issued from roaming mobile stations in the manner claimed.

2. Claims 2, 3, 7, 10

The Examiner rejected claims 2, 3, 7 and 10 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Lundborg. The rejection is traversed. Lundborg does not overcome the deficiency of Akhteruzzaman and Lencevicius in failing to teach claim 1.

In particular Claims 2, 3 and 7 and 10 depend from claim 1. Lundbord is concerned with handoff of mobile devices between cells and methods of tuning a parameter indicating the minimum sufficient signal strength threshold used in determining whether or not a preferred cell is suitable. (Background, col. 1 lines 7-14). Lundbord does not address call forwarding, nor does he teach or suggest that call forwarding, having been switched on, should be switched off in accordance with the teachings of claim 1 discussed above. Combining Lundborg with Lencevicius and Akhteruzzaman only suggests, at most, using Ec/Io measurements as a mechanism for measuring signal strength initially and sending a group of outgoing communications from

the phone to the network as mentioned in Figure 7 and paragraph 38 of Lencevicius. Neither Lundbord, Akhteruzzaman nor Lencevicius suggest monitoring signal strength as the trigger to initiate the call forwarding (recall the Lencevicius is concerned with preservation of battery power level, and received signal strength and batter power level are different concepts). Nor do they teach, either solely or in combination, continuing to monitor received signal strength after call forwarding has been initiated and sending a second feature code when signal strength has improved above the threshold level. Accordingly, they cannot render claims 2, 3, 7 and 10 obvious.

3. Claim 6

The Examiner rejected claim 6 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Lo (RE 37,301). While the Examiner is correct that Lo teaches transmitting information codes over access channels, this teaching of Lo fails to overcome the deficiency of Akhteruzzaman in combination with Lencevicius in failing to teach the subject matter of claim 1. Lo adds nothing to how a mobile device should perform call forwarding using a monitoring of received signal strength. Accordingly, the rejection of claim 6 should be withdrawn.

4. Claim 8

The Examiner rejected claim 8 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Jensen. Claim 8 recites that the threshold level [to initiate sending of feature codes to turn on and off call forwarding] depends on the type of mobile station. The applicants traverse the rejection.

The Examiner cites Jensen for a teaching of call forwarding wherein the threshold level for call forwarding varies on the type of mobile station (Jensen, paragraph 15). Applicants submit that this is not a correct analysis of Jensen. Jensen teaches that values involved (signal strength, related to interference of channels between cells) are "determined by the particular type of ***mobile system involved***." The reference then discusses various types of mobile systems (not ***types of devices, as in claim 8***) such as CDMA system and AMPS (American mobile phone systems). Claim 8 is concerned with different types of mobile devices (such as year, make and model of device) within a given mobile phone system, not differences between mobile phone systems.

Moreover, even if the concepts of Jensen were applied to Lencevicius or Akhteruzzaman, the resulting combination does not overcome the rejection of claim 1 since Jensen is silent on call forwarding as claimed in claim 1 and instead is directed to handoff between cells and determining interference between cells. It does not overcome the deficiency of Akhteruzzaman in combination with Lencevicius discussed above.

Furthermore, applicant's representative can find no mention of feature codes in the Jensen reference or usage of such features codes to turn on or off call forwarding.

In view of the above, the rejection of claim 8 should be withdrawn.

5. Claim 9

The Examiner rejected claim 9 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Chawla. Claim 9 depends from claim 1 and further recites that the threshold level [to initiate sending of feature codes to turn on and off call forwarding] is within a certain decibel range.

Assuming for the sake of argument that Chawla is appropriate for citation of the subject matter of claim 9, it does not make up for the deficiency of Akteruzzaman in combination with Lencevicius in failing to teach or suggest the subject matter of claim 1, from which claim 9 depends. In particular, Chawla is directed to methods for determining organizational parameters in a wireless system and discloses methods of determining signal strength and losses in wireless communications systems. Chawla is silent on a call forwarding feature, let alone call forwarding as claimed in claim 1. Even if Chawla was combined with Lencevicius as the primary reference, or Akhteruzzaman as a secondary reference, at most it teaches characterization of organization parameters in a wireless system such as the Lencevicius or Akhteruzzaman system, but that fails to account for a method by which call forwarding should be terminated, by means of feature codes, as claimed in claim 1. Accordingly, the rejection of claim 9 should be withdrawn.

6. Claim 12

The Examiner rejected claim 12 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Haub. Haub is cited for a teaching of circuitry monitoring a ratio of Ec/Io where Ec is a measure of carrier strength and Io is a measure of interference.

Haub's teaching does not overcome the deficiency of Akhteruzzaman in combination with Lencevicius in failing to teach or suggest the feature of claim 11 of a wireless telephone that includes logic "automatically continuing to monitor the received signal strength after the first feature code is transmitted ***and for transmitting a second feature code . . . deactivating call forwarding when said circuitry determines that the***

received signal strength, having fallen previously below a threshold level, rises above said threshold level." As noted above, Lencevicius uses a power management initiation signal (either manual or automatically when the battery level drops low) to trigger call forwarding, and disabling of the power profile to deactivate call forwarding (paragraph 30). Akhteruzzaman uses GPS location as the triggering event to turn off call forwarding. Neither reference is based on received signal strength.

Haub's teaching is irrelevant to Lencevicius since that reference uses a power management initiation signal, not signal strength measurements, to initially activate call forwarding. It is irrelevant to Akhteruzzaman since that references uses GPS data, not signal strength measurements, to deactivate call forwarding. Haub does not suggest continuing to monitor Ec/Io after a call forwarding signal has been sent and deactivating call forwarding in the event Ec/Io rises above the threshold.

Consequently, even if Haub were to be combined with Lencevicius or Akhteruzzaman, the result is the not invention of claim 12. The rejection should be withdrawn.

7. Claim 14

The Examiner rejected claim 14 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Kissee. The disclosure of received signal strength indicator (RSSI) in Kissee is in the context of how cells should be ranked in order to prioritize cells and handle a situation of overflow or excess call volumes. See col. 12 lines 48 et seq., col. 1 lines 7-14; col. 2 lines 51-65. The context of Kissee' teaching of setting thresholds for purposes of cell rankings adds nothing to the utter lack of a

teaching in either Akhteruzzaman or Lencevicius of monitoring received signal strength and sending a feature code to a network node to turn off call forwarding when the signal strength rises above a threshold. Since the network node of Kissee ***is ranking cells, not activating and deactivating call forwarding***, it does not teach a "service control node in said cellular telephony network that activates and deactivates a call forwarding service for said roaming mobile stations, wherein said call forwarding service is activated and deactivated by transmission of first and second feature codes from said roaming mobile stations, respectively, and further wherein said first and second feature codes are transmitted when a monitored measure of received signal strength at said mobile stations falls below, and rises above, a threshold level, respectively", as claimed in claim 13, from which claim 14 depends.

8. Claim 15

The Examiner rejected claim 15 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Balachandran. The Examiner cites Balachandran for a teaching of a threshold level at which calls are dropped, citing to col. 2 lines 24-25. The discussion of thresholds in Balachandran is in the context of ***handoff of a mobile between cells/sectors, not call forwarding***. The document discloses that there can be two thresholds, a primary one and a secondary or emergency threshold, see col. 2 lines 2-5. The reference is explaining background information on handoffs between cells and sectors, noting that such handoffs preferably occur so as to avoid dropping of calls. That teaching is totally irrelevant to the subject matter of claim 15 (and independent claim 13) of a node in a network that is switching on and off call forwarding in response to

measurements of received signal strength. Balachandran fails to overcome the deficiency of Lencevicius or Akhteruzzaman in failing to teach of monitoring received signal strength and sending a feature code to a network node to turn off call forwarding when the signal strength rises above a threshold.

9. Claim 16

The Examiner rejected claim 16 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Hilliard. Claim 16 depends ultimately on claim 13 and recites that the threshold level (for triggering sending a feature code to turn off call forwarding) is offset from a dropped call level by a fixed amount.

Hilliard is non-analogous art, in that it is referring to calibration of inductive vehicle detectors. See col. 4 lines 54-col. 5 line 23. The present invention is directed to call forwarding in the field of wireless telephony. The two fields have nothing to do with each other. Furthermore, the Hilliard method discloses nothing in the way of call forwarding for wireless telephones and adds nothing to the deficiency of Lencevicius or Akhteruzzaman to suggest the subject matter of claim 13.

10. Claim 17

The Examiner rejected claim 17 as obvious over Akhteruzzaman in view of Lencevicius, and further in view of Jensen. The applicants traverse the rejection.

The Examiner cites Jensen for a teaching of call forwarding wherein the threshold level for call forwarding varies on the type of mobile station (Jensen, paragraph 15).

Applicants submit that this is not a correct analysis of Jensen. Jensen teaches that values involved (signal strength, related to interference of channels between cells) are "determined by the particular type of ***mobile system involved***." The reference then discusses various types of mobile systems (not ***types of devices, as in claim 17***) such as CDMA system and AMPS (American mobile phone systems). Claim 17 is concerned with different types of mobile devices (such as year, make and model of device) within a given mobile phone system, not differences between mobile phone systems. Accordingly, when the teaching of Jensen is applied to Akhteruzzaman and Lencevicius it fails to overcome the deficiencies noted above in the analysis of claim 13.

Conclusion

Applicants submit that the claims in their present form are allowable. Favorable reconsideration of the application is requested.

Respectfully submitted.

McDonnell Boehnen Hulbert & Berghoff LLP

Date: May 1, 2007 By: _____

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CERTIFICATE OF MAILING

The undersigned hereby certifies that the foregoing Response to January 3, 2007 office action is being deposited as first class mail, postage prepaid, in an envelope addressed to MAIL STOP Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450, on this 1st day of May, 2007

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Thomas A. Fairhall